

REMARKS

This application has been amended in a manner that is believed to place it in condition for allowance at the time of the next Official Action.

Claims 17-25, 30-33 and 35-36 are pending in the present application.

Independent claims 17 and 30 have been amended to recite "directly heating" organic material with the recited tubular element or elements. Support for the changes may be found in the original claims and generally throughout the specification. Support for new claims 35 and 36 may be found at page 8, lines 1-5. Claims 1-16, 26-29 and 34 have been canceled.

Claims 17-34 stand rejected under 35 USC 103(a) as allegedly being unpatentable over UNDERWOOD et al. in view of WISTREICH et al. This rejection is traversed.

UNDERWOOD et al. disclose an aqueous wood smoke solution for flavoring foodstuffs. The aqueous wood smoke solution is produced by heating ground wood or cellulose in an oxygen starved atmosphere to between 400°C and 650°C.

However, UNDERWOOD et al. neither disclose nor suggest directly heating and vibrating organic material with an ascending tubular element or elements to produce a pyrolysis reaction. At col. 8, lines 55-60, UNDERWOOD et al. state that a

"fast pyrolysis of wood is initiated in the thermal mixer (1) and continues in a transport reactor (9). The transport reactor is a length of pipe which is

housed in an electrical oven (10). The mixture of hot gases and biomass passes from the thermal mixer (1), through the transport reactor (9), to the quencher (2) and to the solids separator (23)."

Thus, UNDERWOOD et al. utilize a length of pipe, wherein the length of pipe is placed in an electrical oven and heated indirectly. The heating step that utilizes the heating coils disclosed by UNDERWOOD et al. do not directly heat a material as recited in the claim invention. Rather, the heating coils disclosed by UNDERWOOD et al. are an indirect heat source. Independent claims 17 and 30 state that the organic material is directly heated by the tubular element or elements.

Thus, UNDERWOOD et al. neither disclose nor suggest directly heating or vibrating an ascending tubular element or elements to produce a pyrolysis reaction. In imposing the rejection, the Official Action also acknowledges that UNDERWOOD et al. fail to a vibratory element, a step of preheating, a step of condensing smoke product, a re-injection step, and the amount of benzoanthracene that is disclosed. In an effort to remedy the deficiencies of UNDERWOOD et al. for reference purposes, the Official Action cites to WISTREICH et al.

WISTREICH et al. disclose a liquid smoke and a method for making the liquid smoke. Hardwood, in finely divided particulate form, is fed continuously from a hopper 12 to form a layer 14 on a metal plate 16, in the form of a vibratory conveyor for advancement of the particulate material through an enclosed

space 18 heated to a temperature sufficient to cause thermal destruction or degradation of the wood particles. The bottom side of the plate 16 is heated, directly or indirectly, as by a flame, at an elevated temperature of about 600 °C to 750 °C (col 2, lines 40-50 and Fig.1).

Accordingly, WISTREICH et al. utilize a method that requires a flat conveyor. WISTREICH et al. do not disclose or suggest an ascendant tubular element with a heating device.

In this regard, it is believed that one skilled in the art would lack the motivation to combine and modify the publications to obtain the claimed invention.

Applicants also respectfully submit that the Official Action fails to show that one skilled in the art would expect the benzoanthracene would be in an amount as recited in the claims. To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted).

There is no indication that the processes disclosed by UNDERWOOD et al. or WISTREICH et al. would inherently provide

this feature. Thus, it is believed that the Official Action fails to satisfy its burden in showing that the recitation would be expected or present.

The Examiner is reminded that a critical step in analyzing obviousness pursuant to 35 U.S.C. §103(a) is casting the mind back to the time of the invention, to consider the thinking of one of ordinary skill in the art, only guided by the publications and then-accepted wisdom in the field. Close adherence to this methodology is important in cases where the invention itself may prompt an Examiner to "fall victim to the insidious effect of a hindsight syndrome, wherein that which only the invention taught is used against its teacher." Indeed, to establish a *prima facie* case of obviousness, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. *In re Kotzab*, 217 F.3d 1365, 1369-70, 55 USPQ 2d 1313, 1362 (Fed. Circ. 2000). The fact that the prior art could be so modified would not have made the modification itself obvious unless the cited publications themselves suggested the desirability of the modification. *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Circ. 1984).

In light of the lack of a motivation, suggestion or teaching of the desirability of making the claimed combination, applicant believes that the publication fails to disclose or suggest the claimed invention.

Claims 1-16 were provisionally rejected on the grounds of non-statutory obviousness-type double patenting as allegedly being unpatentable over claims 1-15 of copending Application No. 10/765,123.

However, the rejection is a "provisional" nonstatutory obviousness-type double patenting rejection. As set forth in MPEP §804, if a "provisional" nonstatutory obviousness-type double patenting rejection is the only rejection remaining in the earlier of the two pending applications, while the later-filed application is rejected on other grounds, the Examiner should withdraw that rejection and permit the earlier-filed application to issue as a patent without a terminal disclaimer.

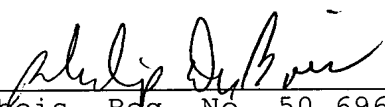
Thus, as the obviousness rejection should be withdrawn for the reasons noted above and there no other issues remaining, applicants respectfully request that the present application be allowed without a terminal disclaimer.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any

overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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